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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants : Yingru Wu et al.
U.S. Serial No. : 10/594,785
Filed : as §371 national stage of
PCT/AU2005/000467, filed March 31,
2005
For : GENES INVOLVED IN PLANT FIBRE
DEVELOPMENT

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New York, New York 10036
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Commissioner for Patents
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SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT

In order to ensure compliance with applicants' duty of disclosure under 37 C.F.R. §1.56 and §1.97(a)-(d), applicants submit this Information Disclosure Statement to supplement the Information Disclosure Statement filed September 29, 2006. Applicants request that the documents listed on Form PTO-1449, attached hereto as **Exhibit A**, be considered and made of record in the above-identified application. These documents are the following:

1. Ali, S. et al., (2000) "Normalisation of Cereal Endosperm EST Libraries for Structural and Functional Genomic Analysis," *Plant Molecular Biology Reporter*, 18(2): 123-132 (**Exhibit 1**);
2. Beasley, C.A. and I.P. Ting, (1973) "The Effects Of Plant Growth Substances On In Vitro Fiber Development From Fertilized Cotton Ovules," *American Journal of Botany*,

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60(2): 130-139 (**Exhibit 2**);

3. Bourque, J., (1995) "Antisense Strategies For Genetic Manipulations In Plants," *Plant Science*, 105(2): 125-149 (**Exhibit 3**);
4. Cousins, Y.L., et al., (1991) "Transformation Of An Australian Cotton Cultivar: Prospects For Cotton Improvement Through Genetic Engineering," *Australian Journal Of Plant Physiology*, 18(5): 481-494 (**Exhibit 4**);
5. Craig, S., and C.D. Beaton, (1996) "A Simple Cryo-SEM Method For Delicate Plant Tissues," *Journal of Microscopy*, 182(2): 102-105 (**Exhibit 5**);
6. Di Cristina, M., et al., (1996) "The Arabidopsis Athb-10 (GLABRA2) Is An HD-Zip Protein Required For Regulation Of Root Hair Development," *The Plant Journal*, 10(3): 393-402 (**Exhibit 6**);
7. Dowd, C., et al., (2004) "Gene Expression Profile Changes in Cotton Root and Hypocotyl Tissues in Response to infection with *Fusarium oxysporum* f. sp. *Vasinfestum*," *Molecular Plant-Microbe Interactions*, 17(6): 654-667 (**Exhibit 7**);
8. Fatima Bonaldo, M., et al., (2007) "Normalization and Subtraction: Two Approaches to Facilitate Gene Discovery," *Genome Research*, 6(9): 791-806 (**Exhibit 8**);
9. Glover, B.J., et al., (1998) "Development Of Several Epidermal Cell Types Can Be Specified By The Same MYB-related Plant Transcription Factor," *Development*, 125(17): 3497-3508 (**Exhibit 9**);

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10. Harmer, S.E., et al., (2002) "Characterisation of six α -expansin genes in *Gossypium hirsutum* (upland cotton)," *Mol Genet Genomics*, 268(1): 1-9 (**Exhibit 10**);
11. Haseloff, J. and W.L. Gerlach, (1988) "Simple RNA Enzymes With New And Highly Specific Endoribonuclease Activities," *Nature*, 334(6183): 585-591 (**Exhibit 11**);
12. Hasenfratz, M., et al., (1995) "Expression Of Two Related Vacuolar H⁺-ATPase 16-Kilodalton Proteolipid Genes Is Differentially Regulated In A Tissue-Specific Manner," *Plant Physiology*, 108(4): 1395-1404 (**Exhibit 12**);
13. Horsch, R.B., et al., (1985) "A Simple And General Method For Transferring Genes Into Plants," *Science*, 227(4691): 1229-1231 (**Exhibit 13**);
14. Ji, Sheng-Jian, et al., (2003) "Isolation and analyses of genes preferentially expressed during early cotton fiber development by subtractive PCR and cDNA array," *Nucleic Acids Research*, 31(10): 2534-2543 (**Exhibit 14**);
15. Joubés, J. and Chevalier C., (2000) "Endoreduplication in higher plants," *Plant Molecular Biology*, 43(5-6): 735-745 (**Exhibit 15**);
16. Joubés, J., et al., (2000) "Molecular characterization of the expression of distinct classes of cyclins during the early development of tomato fruit," *Planta*, 211(3): 430-439 (**Exhibit 16**);
17. Li, Chun-Hong, et al., (2002) "Isolation of genes preferentially expressed in cotton fiber by cDNA filter arrays and RT-PCR," *Plant Science*, 163(6): 1113-1120

(Exhibit 17);

18. Li, Xue-Bao, et al., (2002) "Molecular Characterisation of Cotton GhTUB1 Gene That Is Preferentially Expressed in Fiber, *Plant Physiology*, 130(10.1104): 666-674

(Exhibit 18);

19. Loguerccio, L.L., et al., (1999) "Differential Regulation Of Six Novel MYB-Domain Genes Defines Two Distinct Expression Patterns In Allotetraploid Cotton (*Gossypium hirsutum* L.)," *Molecular and General Genetics*, 261(4-5): 660-671

(Exhibit 19);

20. Lu, P., et al., (1996) "Identification Of A Meristem L1 Layer-Specific Gene In Arabidopsis That Is Expressed During Embryonic Pattern Formation And Defines A New Class Of Homeobox Genes," *The Plant Cell*, 8(12): 2155-2168

(Exhibit 20);

21. Ma, D., et al., (1995) "Differential Expression Of A Lipid Transfer Protein Gene In Cotton Fiber," *Biochimica et Biophysica Acta*, 1257(1): 81-84 **(Exhibit 21);**

22. Ma, D., et al., (1997) "Cloning And Characterization Of A Cotton Lipid Transfer Protein Gene Specifically Expressed In Fiber Cells," *Biochimica et Biophysica Acta*, 1344(2): 111-114 **(Exhibit 22);**

23. Masucci, J., et al., (1996) "The Homeobox Gene GLABRA 2 Is Required For Position-Dependent Cell Differentiation In The Root Epidermis Of Arabidopsis Thaliana," *Development*, 122(4): 1253-1260 **(Exhibit 23);**

24. Meijer, M. and Murray, J.A.H., (2000) "The role and

regulation of D-type cyclins in the plant cell cycle," *Plant Molecular Biology*, 43(5-6): 621-633, **(Exhibit 24);**

25. Murray, F., et al., (1999) "Expression Of The Talaromyces Flavus Glucose Oxidase Gene In Cotton And Tobacco Reduces Fungal Infection, But Is Also Phytotoxic," *Molecular Breeding*, 5(3): 219-232 **(Exhibit 25);**
26. Nakazono, M., et al., (2003) "Laser-Capture Microdissection, a Tool for Global Analysis of Gene Expression in Specific Plant Cell Types: Identification of Genes Expressed Differently in Epidermal Cells or Vascular Tissues of Maize," *The Plant Cell*, 15(3): 583-596 **(Exhibit 26);**
27. Noda, K., et al., (1994) "Flower Colour Intensity Depends On Specialized Cell Shape Controlled By A Myb-Related Transcription Factor," *Nature*, 369(6482): 661-664 **(Exhibit 27);**
28. Ohashi, Y., et al., (2002) "Entopically additive expression of GLABRA2 alters the frequency and spacing of trichome initiation," *The Plant Journal*, 29(3): 359-369 **(Exhibit 28);**
29. Orford, S.J. and J.N. Timmis, (1998) "Specific Expression Of An Expansin Gene During Elongation Of Cotton Fibres," 1389(3): 342-346 **(Exhibit 29);**
30. Payne, T., et al., (1999) "Heterologous MYB Genes Distinct From GL1 Enhance Trichome Production When Overexpressed In Nicotiana Tabacum," *Development*, 126(4): 671-682. **(Exhibit 30);**

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31. Rerie, W.G., et al., (2007) "The GLABRA2 gene encodes a homeo domain protein required for normal trichome development in *Arabidopsis*," *Genes & Development*, 8(12): 1388-1399 (**Exhibit 31**);
32. Riou-Khamlichi, C., et al., (1999) "Cytokinin Activation Of *Arabidopsis* Cell Division Through A D-Type Cyclin," *Science*, 283(5407): 1541-1544 (**Exhibit 32**);
33. Ruan, Y. and P.S. Chourey, (1998) "A Fiberless Seed Mutation In Cotton Is Associated With Lack Of Fiber Cell Initiation In Ovule Epidermis And Alterations In Sucrose Synthase Expression And Carbon Partitioning In Developing Seeds," *Plant Physiology*, 118(2): 399-406 (**Exhibit 33**);
34. Schellmann, S., et al., (2002) "TRIPTYCHON and CAPRICE mediate lateral inhibition during trichome and root hair patterning in *Arabidopsis*," *The EMBO Journal*, 21(19): 5036-5046 (**Exhibit 34**);
35. Schenk, P. M., et al., (2000) "Coordinated plant defense response in *Arabidopsis* revealed by microarray analysis," *PNAS*, 97(21): 11655-11660 (**Exhibit 35**);
36. Schnittger, A., et al., (2002) "Ectopic D-type cyclin expression induces not only DNA replication but also cell division in *Arabidopsis* trichomes," *PNAS*, 99(9):6410-6415 (**Exhibit 36**);
37. Schönmann, P.H.D., et al., (2003) "A suite of novel promoters and terminators for plant biotechnology," *Functional Plant Biology*, 30(4): 443-452 (**Exhibit 37**);
38. Smith, N. A., et al., (2000) "Total silencing by intron-

spliced hairpin RNAs," *Nature*, 407(6802): 319-320
(**Exhibit 38**);

39. Solano, R., et al., (1995) "Dual DNA Binding Specificity Of A Petal Epidermis-specific MYB Transcription Factor (MYB.Ph3) From *Petunia Hybrida*," *The EMBO Journal*, 14(8): 1773-1784 (**Exhibit 39**);
40. Sorrell, D.A., et al., (1999) "Distinct Cyclin D Genes Show Mitotic Accumulation Or Constant Levels Of Transcripts In Tobacco Bright Yellow-2 Cells," *Plant Physiology*, 119(1): 343-351 (**Exhibit 40**);
41. Stracke, R., et al., (2001) "The R2R3-MYB gene family in *Arabidopsis thaliana*," *Current Opinion in Plant Biology*, 4(5): 447-456 (**Exhibit 41**);
42. Szymanski, D. and M.D. Marks, (1998) "GLABROUS1 Overexpression And TRIPTYCHON Alter The Cell Cycle And Trichome Cell Fate In *Arabidopsis*," *The Plant Cell*, 10(12): 2047-2062 (**Exhibit 42**);
43. Szymanski, D.B., et al., (2000) "Progress in the molecular genetic analysis of trichome initiation and morphogenesis in *Arabidopsis*," *Trends in Plant Science*, 5(5):214-219 (**Exhibit 43**);
44. Van'T Hof, J., (1999) "Increased Nuclear DNA Content In Developing Cotton Fiber Cells," *American Journal of Botany*, 86(6): 776-779 (**Exhibit 44**);
45. Walker, A.R., et al., (1999) "The TRANSPARENT TESTA GLABRA1 Locus, Which Regulates Trichome Differentiation And Anthocyanin Biosynthesis In *Arabidopsis*, Encodes A WD40

Repeat Protein," *The Plant Cell*, 11(7): 1337-1349
(Exhibit 45);

46. Waterhouse, P.M., et al., (1998) "Virus Resistance And Gene Silencing In Plants Can Be Induced By Simultaneous Expression Of Sense And Antisense RNA," *Proceedings of the National Academy of Sciences*, 95(23): 13959-13964
(Exhibit 46);
47. Wesley, S. V., et al., (2001) "Construct design for efficient, effective and high-throughput gene silencing in plants," *The Plant Journal*, 27(6): 581-590
(Exhibit 47);
48. Wilson, D.L., et al., (2003) "New normalization methods for cDNA microarray data," *Bioinformatics*, 19(11):1325-1332
(Exhibit 48);
49. Wu, Y., et al., (2002) "A Quick and Easy Method for Isolating Good-Quality RNA From Cotton (*Gossypium hirsutum* L.) Tissues," *Plant Molecular Biology Reporter*, 20(3): 213-218 (Exhibit 49);
50. Zimmet, J.M., et al., (1997) "A Role For Cyclin D3 In The Endomitotic Cell Cycle," *Molecular and Cellular Biology*, 17(12): 7248-7259 (Exhibit 50);
51. European Application Publication No. EP 0465572, published June 14, 1995 (DNA Plant Technology Corp)
(Exhibit 51);
52. International Application Publication No. WO 87/06614, published November 5, 1987 (Boyce Thompson Institute For Plant Research, Inc.) (Exhibit 52);

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53. International Application Publication No. W0 92/09696,
published June 11, 1992 (Plant Genetic Systems, N.V.)
(Exhibit 53);
54. International Application Publication No. W0 93/21335,
published October 28, 1993 (Plant Genetic Systems)
(Exhibit 54);
55. International Application Publication No. W0 96/06932,
published March 7, 1996 (Common Wealth Scientific and
Industrial Research Organisation; The Australian National
University) **(Exhibit 55);**
56. International Application Publication No. W0 97/20936,
published June 12, 1997 (Zeneca Limited) **(Exhibit 56);**
57. International Application Publication No. W0 99/53050,
published October 21, 1999 (Common Wealth Scientific and
Industrial Research Organisation) **(Exhibit 57);**
58. International Application Publication No. W0 99/49029,
published September 30, 1999 (AG-GENE Australia Limited;
State of Queensland through its Department of Primary
Industries) **(Exhibit 58);**
59. International Application Publication No. W0 01/34815,
published May 17, 2001 (Cambria Bioscience, LLC)
(Exhibit 59);
60. International Application Publication No. W0 03/076619,
published September 18, 2003 (Common Wealth Scientific and
Industrial Research Organisation)
(Exhibit 60);

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61. U.S. Patent No. 4,945,050 issued July 31, 1990 to Sanford et al.;
62. U.S. Patent No. 5,004,863 issued April 2, 1991 to Umbeck, P.F.;
63. U.S. Patent No. 5,104,310 issued April 14, 1992 to Saltin, L.;
64. U.S. Patent No. 5,141,131 issued August 25, 1992 to Miller, Jr. et al.;
65. U.S. Patent No. 5,159,135 issued October 27, 1993 to Umbeck, P.F.;
66. U.S. Patent No. 5,177,010 issued January 5, 1993 to Goldman et al.;
67. U.S. Patent No. 5,384,253 issued January 24, 1995 to Krzyzek et al.;
68. U.S. Patent No. 5,472,869 issued December 5, 1995 to Krzyzek et al.;
69. U.S. Patent No. 5,495,070 issued February 27, 1996 to John, M.;
70. U.S. Patent No. 5,602,321 issued February 11, 1997 to John, M.;
71. U.S. Patent No. 5,608,148 issued March 4, 1997 to John, M.;
and

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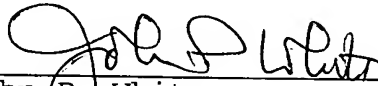
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72. U.S. Patent No. 5,925,517 issued July 20, 1999 to Tyagi et al.).
73. International Preliminary Report on Patentability issued by the International Bureau of WIPO dated October 4, 2006 in connection with International Application No. PCT/AU2005/000467 (**Exhibit 61**)

In accordance with 37 C.F.R. §1.98(a)(2)(ii), copies of U.S. Patents and U.S. Patent Application Publications need not be provided. Accordingly, copies of documents listed above as items 61-72 are not submitted herewith.

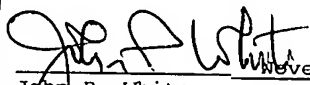
No fee is deemed necessary in connection with the filing of this Information Disclosure Statement. However, if any fee is required, authorization is hereby given to charge the amount of such fee to Deposit Account No. 03-3125.

Respectfully submitted,



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I hereby certify that this correspondence is being deposited this date with the U.S. Postal Service with sufficient postage as first class mail in an envelope addressed to:
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November 13, 2007
John P. White Date
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EXHIBIT A